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Département à  
La Haye  
Division de la  
recherche

Datum/Date

18. 01. 2001

Zeichen/Ref./Réf. HJF/2655630	Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°. 99303347.1
Anmelder/Applicant/Demandeur/PatentInhaber/Proprietor/Titulaire CANON KABUSHIKI KAISHA	

## COMMUNICATION

The European Patent Office herewith transmits

- ☒ the European search report
- ☐ the declaration under Rule 45 EPC
- ☐ the partial European search report under Rule 45 EPC
- ☐ the supplementary European search report concerning the international application under Article 157(2) EPC relating to the above-mentioned European patent application. Copies of the documents cited in the search report are enclosed.

The following specifications given by the applicant have been approved by the Search Division :

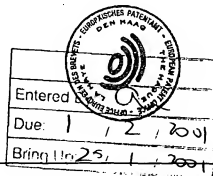
- ☒ Abstract ☐ Title ☒ Figure
- ☐ The abstract was modified by the Search Division and the definitive text is attached to this communication.
- ☐ The following figure will be published with the abstract, since the Search Division considers that it better characterises the invention than the one indicated by the applicant.

Figure:

- ☒ Additional copy(copies) of the documents cited in the European search report.

## REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.



EPO Form 1507 02.93




DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	EP 0 661 726 A (CANON K.K.) 5 July 1995 (1995-07-05)  * Abstract * * column 1, line 6 - line 12 * * column 1, line 38 - line 56; figure 23 * * column 5, line 1 - line 42 * * column 10, line 3 - column 15, line 26; figures 1-3 * ---	1-8, 19, 23, 24, 28, 35, 38, 39, 41-44	G09G3/22 H01J29/94
X	EP 0 688 035 A (CANON K.K.) 20 December 1995 (1995-12-20) * Abstract *	1-5, 7, 8	
A	* page 2, line 18 - line 35; figure 1 * * page 6, line 35 - page 7, line 3 * * page 20, line 43 - page 22, line 47; figure 22 * * page 24, line 15 - line 31 * ---	18	
A	EP 0 604 930 A (CANON K.K.) 6 July 1994 (1994-07-06) * Abstract * * page 2, line 46 - page 3, line 28; figures 1-3 * * page 4, line 47 - line 53 * * page 6, line 11 - page 7, line 7 * * page 12, line 18 - line 24; figures 22, 23 * ---	6	TECHNICAL FIELDS SEARCHED (Int.Cl.6)  G09G H01J
-/-			
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 20 December 2000	Examiner Corsi, F
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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EP 99 30 3347 (P40001)



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (InCL6)
A	EP 0 725 420 A (CANON K.K.) 7 August 1996 (1996-08-07) * Abstract * * column 1, line 5 - line 34; figures 1,2,12,13 * * column 3, line 24 - column 4, line 40 * * column 7, line 41 - column 9, line 35 * * column 13, line 55 - column 14, line 29 * * column 22, line 28 - column 23, line 37 * ---	9	
X	FR 2 747 505 A (FUTABA DENSHI KOGYO K.K.) 17 October 1997 (1997-10-17)	14-16, 30, 32	
Y	* abstract * * page 1, line 5 - line 9 * * page 2, line 12 - line 24 * * page 4, line 10 - line 17 * * page 5, line 10 - line 16; figures 4,6 * * page 8, line 22 - page 9, line 29; figure 1 * ---	17	
Y	PATENT ABSTRACTS OF JAPAN vol. 009, no. 240 (E-345), 26 September 1985 (1985-09-26) -& JP 60 093741 A (MATSUSHITA DENKI SANGYO KK), 25 May 1985 (1985-05-25) * abstract * ---	17	TECHNICAL FIELDS SEARCHED (InCL6)
X	US 5 428 370 A (KNAPP ET AL.) 27 June 1995 (1995-06-27) * abstract * * column 1, line 59 - column 2, line 3; figures 1-4E * * column 7, line 4 - line 21 * * column 8, line 13 - column 10, line 20 * --- -/-	14,15,30	
6 The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 20 December 2000	Examiner Corsi, F
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.C16)
E	WO 99 24961 A (CANDESCENT TECHNOLOGIES CO) 20 May 1999 (1999-05-20) * abstract * * page 1, paragraph 1 - page 4, paragraph 1 * * page 5, paragraph 3 - page 7, paragraph 1; figures 3,4 * * page 8, paragraph 3 - page 9, paragraph 3; figure 5 * * page 10, paragraph 1 - page 11, paragraph 2; figure 6 * * page 12, paragraph 2; figure 7 * ---	14-16, 30,32	TECHNICAL FIELDS SEARCHED (Int.C16)
X	US 3 946 381 A (JOHNSON ET AL.) 23 March 1976 (1976-03-23) * abstract * * column 2, line 64 - column 3, line 17; figure 1 * * column 5, line 4 - column 6, line 31; figures 6-11 * ---	20,21	
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X	US 5 136 397 A (MIYASHITA) 4 August 1992 (1992-08-04) * abstract * * column 1, line 11 - column 2, line 23; figure 1 * * column 4, line 12 - column 5, line 20; figure 2 * ---	29	
-/-			
The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>20 December 2000</b>	Examiner <b>Corsi, F</b>
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document		T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons Δ: member of the same patent family, corresponding document	



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X,P	<p>EP 0 878 788 A (SONY CO.) 18 November 1998 (1998-11-18) * abstract * * column 6, line 41 - column 7, line 16; figures 1,2,4,5,8-10 * * column 8, line 19 - line 35 * * column 9, line 24 - line 47 * * column 10, line 22 - column 12, line 31 * -----</p>	29	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>20 December 2000</b>	Examiner <b>Corst, F</b>
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... &amp; : member of the same patent family, corresponding document</p>			

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EPO FORM 1503 (3.82 (Rev.01))



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-9,19,23,24,28,35,38,39,41-44

Image display apparatus controlled in accordance with a detected current flowing therein, possibly in a panel spacer

2. Claims: 10-13

Image display apparatus controlled in accordance with a detected current flowing outside the image display area, possibly in a sensing electron emitting device.

3. Claims: 14-17,30-32

Image display apparatus controlled in accordance with a detected potential of the display panel.

4. Claim : 18

Image display panel apparatus with electron source, controlled in dependence on its state, detected while no electron is emitted by the source.

5. Claims: 20,21

Image display panel apparatus controlled in accordance with a detected discharge within the panel.

6. Claim : 22

Image display panel apparatus controlled in accordance with a detected power consumption in the display panel.

7. Claims: 25-27

Image display apparatus controlled in accordance with a detected display state, with memory for storing details about detected abnormalities information.

8. Claim : 29

Image display apparatus with prompting of a user to control such apparatus in accordance with a detected display state.



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

9. Claims: 33,34

Image display apparatus whose degree of vacuum is controlled in accordance with a detected display state.

10. Claims: 36,37

Image display apparatus where a display control operation is selected from a plurality of control operations in accordance with a detected display state.

11. Claim : 40

Image display apparatus with a panel having high degree of vacuum.



#### CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

#### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☒ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:  
14-18, 20, 21, 29, 30-32
- ☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 99 30 3347

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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